Draft Ventura County Municipal Separate Storm Sewer System Permit NPDES Permit No. CAS004002



SCAG Water Quality Task Force

CalEPA - Los Angeles / Ventura Water Board Xavier Swamikannu, D.Env. November 29, 2007

MS4 Permitting History Ventura County

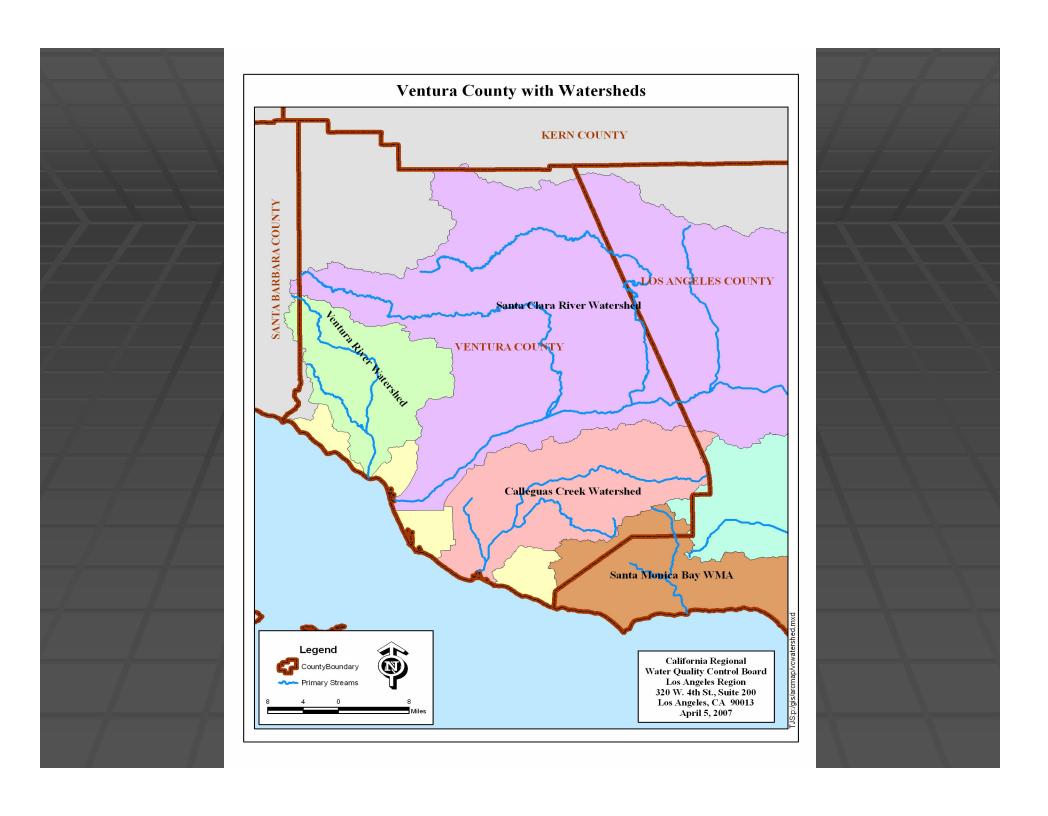
- Clean Water Act Section 402 (p) (1987)
- 40 CFR 122.26 (1990)
- Part 1 and Part 2 MS4 permit application
 - City of Thousand Oaks
 - City of Oxnard
 - Unincorporated Ventura County
 - Ventura County Flood Control District

MS4 Permitting Background Ventura County

- Area wide designation
- Consolidated Part 2 application (1993)
- First term Ventura County MS4 Permit (1994)
 - > Program development
- Second term Ventura County MS4 Permit (2000)
 - Program implementation

MS4 Permitting Main Advancements in Third Term

- Transparency
- Municipal Action Levels (MALs)
- Specified Best Management Practices
- Numerical criteria to reduce runoff volume
- Low Impact Development implementation
- Waste Load Allocations for wet weather



Municipal Storm Drain Systems Within Ventura County

	CO-PERMITTEE AGENCIES	OPEN CHANNEL SOFT SIDE AND BOTTOM	OPEN CHANNEL HARD SIDE OR BOTTOM	OPEN CHANNELS HARD SIDE AND BOTTOM	UNDERGROU NG STORM DRAINS	DITCHES	GUTTERS	OTHER STORM DRAIN	TOTAL LENGTH in ft.
	Principal Co-permittee								
	VCWPD	409,728	307,296	204,864	102,432	•	-	•	1,024,320
4	Co-permittees								
\parallel	City of Camarillo	•	-	٠	400,00	32,178	2,956,800	1.095	3,390,073
1	County of Ventura	29,568	22,176	14,784	7,392	•	•	-	73,920
A	City of Fillmore	-		300	35,500	1,000	316,800	-	353,600
	City of Moorpark	•	-	•	136,000	10,000	940,000	22	1,086,022
	City of Ojai		-	7,920	31,680	-	337,920		377,520
1	City of Oxnard	63,360	15,840	26,400	211,200	-	2,112,00	•	2,428,800
4	City of Port Hueneme	5,000	-	•	66,000	•	440,000	٠	511,000
	City of Ventura	9,477	-	9,869	-	76,603	-	1,708	97,657
	City of Santa Paula	582	-	-	96,817	18,174	633,600		749,173
	City of Simi Valley	4,000	-	1,000	553,115	-	3,146,880	-	3,704,995
	City of Thousand Oaks		534	· .	790,164	-	5,533,440		6,324,138

Municipal Action Levels (MALs)

- MALs introduced in December 27, 2006 draft Ventura County MS4 Permit
- MALs developed from National Storm Water Quality Dataset monitoring information
- MALs represent a quantifiable expression of MEP

Public Information & Participation Program

- Increase public awareness of the potential impacts on storm water quality that common activities can have
- Increase public knowledge of storm water regulations

Illicit Connections & Illicit Discharges (IC/ ID) Elimination Program

- Eliminate all IC/ ID to the storm drain system
- Requirements
 - Investigation
 - Referral
 - > Mapping
 - > Field screening



Industrial & Commercial Program

- Reduce pollutants in storm water from industrial and commercial sites
- Municipal operator to control pollutants discharged through municipal systems
- Requirements
 - > Site visits Inspections
 - Mandatory BMPs



Land Development Planning

- Maintain the pre-construction hydrology of the site to reduce adverse impacts
- Select post-construction controls during project planning and design
- Requirements
 - Implementation
 - Reduce effective impervious
 - Implement Low Impact Development (LID)
 - Post construction

Development Construction Program

- Sediment, sedimentation/ siltation primary pollutants impacting beneficial uses
- Pollutants adsorb onto sediment particles
- Requirements
 - Grading restrictions
 - Minimum set of best management practices
 - Inspection Requirements
 - > Interagency Coordination





Public Agency Activities

- A Model Storm Water Pollution Control Plan for each City Yard
- Trash Management Controls
- Storm Drain Maintenance and Cleaning
- Staff Training
- Requirements
 - Standardized permitting
 - Implementation of Post Construction Controls
 - Implementation of standard procedures

Trash Excluders





Total Maximum Daily Load (TMDL) Provisions

- MS4 TMDL Waste Load Allocations (WLAs) incorporated into Permit
- WLAs are expressed as effluent limits
- WLAs have monitoring requirements



Monitoring Program

- Assess chemical, physical, and biological impacts of storm water
- Assess receiving water quality
- Assessing compliance
- Characterize storm water discharges
- Identify pollutant sources

Reporting Program

- Reporting Program requires an Annual Report
- Annual Report is composed of:
 - Monitoring Report
 - Program Report



Ventura County Municipal Storm Water (MS4) Permit – draft

Significant Advancements

- Municipal Action Levels
- Hydromodification Control Criteria
- Low Impact Development Strategies
- Wet Season Hillside Grading Restriction
- Monitoring for Compliance
- TMDL Implementation

Benefits/ Costs

- Ventura County estimates costs for full compliance will range from \$60 million to \$140 million.
- Water Board Study- Alternative Approaches to Storm Water to Storm Water Quality Control, Final Report, J.S. Devinny, S. Kamieniecki, M.K. Stenstrom (2004)
 - Benefits outweigh costs 3:1 based on groundwater augmentation, reduced flood management needs, increase in property values, increase in coastal tourism, reduced dredging of bays and harbors.